

3  
borne on slender curved stalks, which suggested the name crane-berry, the neck of a crane, are about the size of currants, crimson in color, often spotted and have an acid or astringent taste.

Although the larger variety is the one that is cultivated and used commercially the smaller is considered to produce finer flavored fruits.

The cranberries prefer swampy or marshy soil, rich in peat and that is one reason we find cranberries in what is known as Cranberry Glades in Pocahontas county. Sphagnum, a genus of the mosses, furnishes the peat. The land must be well drained and we find that many small streams rise in these glades and flow west or south to Cranberry or Cherry Rivers.

Sphagnum, a genus of the mosses found in this region is of the family Sphagraceae and grows in moist places or bogs forming a soft, thick carpet, saturated with water. These are perennials of feathery aspect, growing at the top of the stem from year to year. Some of the numerous branches grow upward and form tufts at the apices of the stems, while others droop downward and envelope the lower portion of the stem. Each year one of the side branches grows so strongly as to rival the main head, and thus gives a forked appearance to the plant. The lower end of the stem is continuously dying away, eventually forming peat, and thus frees the lower ends of the branches, which

16-4  
thereupon start into independent plants. Special branches, differentiated by color and structure, produce the sexual organs, the two organs being on the same plant or separated. The spore-capsules are on short branches and are globular, with a lid. The small, translucent leaves, like the stem have strata of transparent cells, connected by holes, which are capable of absorbing and retaining much water. This ability to retain water has made the sphagnum moss very valuable to florists, who use it for packing bulbs and flowers, and forms a large part of the compost employed for growing pitcher-plants and orchids.

During the entire season Orchids have been found about the dryer areas of the bogs and its presence is also made possible by the growth of sphagnum-moss. These monocotyledonous plants of the order Orchidaceae of which there are more than 12,000 known species and many thousand varieties are by far the most interesting order of plants of the entire vegetable kingdom because of the extraordinary mode of growth and existence, their great age and endurance, their curious habits and varied forms of their flowers, which are distinct from all other plants, fine in texture and of glowing and exquisite colors. They are remarkable also because of their ready adaptability and free permission of cross-breeding or cross-fertilization. This is true of them in their natural habitat as well as under practical cultivation. This fact accounts for the almost endless varieties of flowers and colors.

(More will follow)

Orchidology

These plants have queer small seeds sometimes millions in a capsule; reproduction was unknown to science for hundreds of years, now these plants are known to sprout only in the presence of certain fungi.

The flower is made up of several parts which include: sepals, petals, labellum or pouch, and column or crest, resting upon the modified hollow ovary, and bearing the one or two stamens and the two or three stigmas. The pollen-grains are aggregated into peculiar pollen masses. The structure of the flower is a modification of the typical three-part pattern of the lilies. Four or five out of the six original stamens of the flower are suppressed also one of the stigmas is suppressed. The labellum, which is a modified petal, is as a rule the most conspicuous part and is the most wonderfully constructed as well as the most important organ of the flower. It is through the labellum that insects, when in search of sweet nectar stored inside the spur or walls of the flower are attracted and guided to it and thus accomplish the benefits of cross-fertilization. It is in this way that so many new varieties, "natural hybrids" are produced by the unconscious work of insects.

Orchids, which are distributed over a large area of both the Eastern and Western hemispheres are divided into two general groups---the East Indian and the South American. These are then classified according to

their growth and subsistence, as saprophytic, epiphytal and terrestrial. The saprophytic include varieties which grow in wet and marshy places and are of little value except for botanical purposes. The epiphytal group which is by far the most valuable and most important grows and thrives best upon trunks or limbs of trees in mid-air simply clinging to a single stem or small limb. It is this group, too, which contains the most beautiful and most valuable species and varieties and the most varied colors.

The terrestrial orchids, as their name indicated are such as grow upon the ground and have no need for the pseudo-bulbs or hypertrophied stems, which are peculiarly characteristic of the epiphytal group. It is the saprophytes and terrestrial groups that we find in the United States. Those found in Cranberry Glades probably belong to the saprophytes class as this region is marshy.

The Grass Pink (*Calopogon pulchellus*) and the Snakemouth Orchid (*Pogonia ophioglossoides*) are fairly abundant, here, and when in bloom, the lovely rich colors of their flowers contrast them with the somber hues of the background of mosses and lichens. A few of the plants of the Yellow-fringed-Orchid are found here but the burnt-orange hue of the ragged flowers, borne on splendid spikes soon attracts the attention of those who have the good fortune to visit this region during the blooming season. Another orchid of this glade, exceedingly rare in this

7

state is the little Twayblade (*Listera Smallii*). This two-leaved dwarf, so small and delicate and hidden away beneath other plants, is likely to remain invisible to all eyes except those trained and alert for the perception of unusual plant forms. Its flowers are few, tiny and a dark purple in color.

Moss-lichen is a combination of moss and lichen. The moss (*Musci*) is a flowerless plant often growing on rocks and in moist places. They help to retain the water supply. Under favorable conditions the life of a moss plant seems to be endless. The male reproductive organs, antherida, are club-shaped and contain cells which afterward develop into antherozoids, these when liberated move about until they come in contact with the female reproductive organ, archegonium. The fertilized archegonium is then carried upward on a slender filament or seta, and now forms the fruit or capsule, usually closed by a lid. When ripe the capsule opens and liberates the spores. The capsules of many species being small sacs at the end of hair-like stalks, which rise in great numbers from a moss cushion. These capsules contain spores from each of which when sown there grows in a few days a tiny plant, the protonema a class of cryptogamous plants forming with the liverworts the group *Muscinae* or Bryophyta. New ones are continually springing from old shoots, so that in bogs the tops remain growing while the under-layers die and the deeper ones slowly change into peat.

8

The lichens, a fungus, attaches itself to the moss in Cranberry Glades forming what is commonly called moss-lichen but is rightly lichens as they are double plants, each made up of an intimate combination of alga and a fungus. The alga furnishes the food and the fungus protects the alga against the sun's rays and absorbs water. Lichens in many places form encrusting growths on rocks and stones, on the stems and branches of trees, on walls and fences and on the earth. They are common in every zone and in all altitudes. They propagate by spores developed in various ways from the component fungus, but with these the partner alga must be speedily associated. Another frequent mode of multiplication is by means of bloodbuds, which consist of a few algal-cells plus a separated portion of the fungus. The fruits of these are known as apothecia. The lichens of which there are 4,000 known species may be grey, yellow, brown, greenish, blue, or black and have neither roots or stems but have layers of variously shaped expansions called thalli. These plants not only make their chosen places of abode more beautiful, but they help pave the way for other forms of life. Growing as they do upon exposed rocks and in barren soil they secrete an acid which dissolves the rock and softens the soil, and in time when they decay and mix with the soil, they enrich it so that more highly-developed plants can grow there.

(MORE TO FOLLOW)

Inventory of Materials

Pocahontas

Topic: Flora S. Va.

Title: Cranberry Glades

Author: Florence Schumann

Date Submitted: \_\_\_\_\_ Length: 715 words

Status:

Editor: \_\_\_\_\_

Contents:

A article from Charleston Gazette  
Sunday Aug. 15, 1937

Source:

Consultant:

Reliability:

File: \_\_\_\_\_

Folder: \_\_\_\_\_

CRANBERRY GLADES.

"Hidden away in the mountains near the western border of Pocahontas county, readily accessible from Richwood, W. Va., lies a bit of strangely fascinating country, the Cranberry Glades. Ever since the discovery of this interesting region, its natural features have attracted the attention of hunters, fishers, botanists, geologists, ornithologists and naturalists of every sort. The Glades proper and the adjoining mountain slopes comprise an area of some 300 acres. The entire section is remote, all in a semi-wild state, away from motor highways and all business and social centers.

"Reaching this isolated wonderland, one finds mute but unmistakable evidence of the relatively recent history of this region, a once magnificent spruce-birch forest destroyed by lumbermen some 30 years ago. The area is now (according to Dr. P. D. Strausbaugh, of the biological department of West Virginia university, one of the best authorities on the Cranberry Glades, who has visited and studied its flora and fauna) occupied by fire cherry, rhododendron and brambles with a liberal admixture of spruce and birch seedlings, all cooperating to lay the foundation of another forest. Decaying stumps and moss covered trunks lying where they fell, still reveal something of the luxuriant forest that stood there in previous generations.

"Orchids grow wild in the Cranberry Glades. Stories are told that from 27 to 77 different species are found. Scientists who have studied plant life there, however, say there are but three different species.

"Dr. Strausbaugh in his article relates: 'Orchids were abundant but only three species were represented. The beautiful blossoms of the snake-mouth orchid (*Pogonia ophioglossoides*) and those of the grass pink (*Calopogon pulchellus*) gave a lively touch to the somber color scheme, standing out like roseate gems against a dull background.

"The Glades are filled with bird life. Visitors, both scientists and laymen, have expressed the belief that every tree and bush has its quota. The woodland is made bewitching by the warblers. Dr. Strausbaugh states: 'The



erry Glades.

of the Veery and the hermit thrush were heard frequently and there certainly can be no music on earth or in heaven more pleasing or expressive than that of the hermit thrush...

"Scientists explain that the formation was probably at one time a lake with deeps and shallows, gradually filling up as vegetation decayed. This explains why some of the glades are more advanced than are others and explains why there is an elevation in the midst of the glades called an 'island' on which there is still virgin timber, void of shrubs and brambles making what appears to be well kept picnicking grounds.

"Recently the federal government has acquired this entire region as a part of the Monongahela National forest. The Cranberry Glades, named from the two species of cranberries that are common in this area, is being improved as a wild-life sanctuary. Thus protected against commercial invasion this area is insured an indefinite period of reforestation and protection of its natural charms and interest for succeeding generations.

"The Glades can now be reached readily, in good weather, through Richwood, by use of forest trails, over which automobiles can pass by arrangements with the United States forest service, with very little inconvenience. The route carries the tourist or other visitor a short distance up the North Fork of the Cherry river, thence over the divide into the Cranberry river valley. Beautiful, rugged natural scenic wonders unfold themselves along an almost perfect water grade route, winding along the Cranberry, past beautiful Camp Woodbine, and past the C.C.C. camp at Cranberry. This route passes 'Dogway' an old lumberjack's landmark, and all along the route may be seen the ruins of former lumber camps, the railroads and log roads which first penetrated this vast area of which within a radius of approximately one hundred miles. Richwood is the largest populated center.

"Under construction now, is the 'Missing Link' of route 39 which, when completed, will give an almost perfect water grade crossing of this area to a junction with the Seneca trail at Mill Point, into the Greenbrier river valley. When

erry Glades.

F lorence Schum

Completed the route will give tourists crossing southern West Virginia into the great valley of Virginia an impressive and interesting travel route through the Monongahela, the George Washington and the Shenandoah national forests, to the famed Sky Line drive and the other shrines, caverns and points of interest in the Old Dominion."

From

"The Charleston Gazette"

Sunday, August 15, 1937 -p. 12.

/ *Ward*

### More About Cranberry Glades

This region surpasses all others in that it furnishes a continuous series of surprises.

It is generally known as Big Glade being in extent some three hundred acres, covered with a carpet of mosses, lichens, low shrubs presenting a multi-colored picture something like a patchwork quilt of gray, green, rose and brown. The glade itself is of an elevation of about 3,400 feet while the mountains all about it rise to about 4,000 feet.

Many species of plants are found here, Buckbean (*Menyanthes trifoliata*), bog rosemary (*Andromeda glaucophylla*), sundew (*Dorsera rotundifolia*), Orchids abound (Three species represented), large fruited juneberry (*Ame-  
lanchier Canadensis*), wild raisin (*Viburnum cassinoides*) and mountain holly (*Ilex monticola*).

On the margin of this large open glade is a well-defined zone of sedges, dulichium and carex. Back of the sedges is a continuous belt of alders beneath which we find aquatic grasses and other herbeceous plants and others such as Skunk Cabbage (*Symplocarpus foetidus* of gray), American hellebore (*Veratrum viride*), and blue monkshood (*Aconitum uncinatum*).

Still back of the alders is the tree zone of spruce and birch with an undergrowth of American yew (*Taxus canadensis*).

There is a vigorous warfare existing between the mosses and lichens. In one place the mosses are successful and gaining ground while in another the lichens are overgrowing the mosses and steadily advancing their lines. The mosses include those species as sphagnum and polytrichum while the cladonias clearly predominate among the lichens. Lichens are found on nearly all the trees which make up plant life in the area around the glade. The falsely called "reindeer moss" (*Cladonia rangiferina*) is really a lichen, and forms rather extensive patches in Cranberry Glades. Its nearly white flowers add much to <sup>? no!</sup> the variegated color-pattern of the glade.

✓ Trailing swamp blackberry is found in abundance and its long prostrate stems bearing a profusion of glossy green leaves makes some very pretty tracings on the dull-colored carpet of lichens.

Following is a description of those plants not described in a previous paper:

The Buckbean (*Menyanthes trifoliata*) is commonly found in spongy, boggy soils and flowers about the latter part of May and early June. The plant has a procumbent stem rising to a height of from six to twelve inches and covered by the sheaths of the leaves and a creeping jointed root. The leaves are trifoliate (like those of clover), with obtuse, ovate leaflets. The flower-stalk terminates in a thyrse of white flowers, rose-colored.